Table of Measurements.

Current number of specimen	22,310.	
Locality	Station 117, off Halifax.	
	Millimetres.	100ths of length.
Length to origin of middle caudal rays	52	
Body:		
Greatest height		25
Height at ventral disc		17
Head:		
Greatest length		25
Greatest width		18
Width of interorbital area		10
Length of snout		6
Length of upper jaw		8
Length of mandible		11
Diameter of orbit		7
Dorsal:		
Distance from snout		32
Anal:		
Distance from snout		40
Caudal:		
Length of middle rays		(8)
Pectoral:		
Distance from snout		23
Length		20
Ventral:		
Distance of disc from snout		9
Length of disc		10
Width of disc		9
Dorsal	48	
Anal	(48)	
Pectoral	15+12 or 13	
Ventral (number of papillæ in disc)	14	

WASHINGTON, *March 22*, 1879.

DESCRIPTION OF A NEW SPECIES OF AMBER FISH (SERIOLA STEARNSII) OBTAINED NEAR PENSACOLA, FLORIDA, BY MR. SILAS STEARNS.

By G. BROWN GOODE and TARLETON H. BEAN.

The National Museum has recently received, from Mr. Silas Stearns, of Pensacola, several species of fishes hitherto unrecorded from the Gulf of Mexico. Among them we recognize *Seriola bonariensis*, Cuv. & Val., previously observed only on the coast of Brazil, which is represented by an individual of 890 millimetres, catalogue-number 22258; also a second species of the same genus, which, though closely related to two Cuban species, has characters which distinguish it from them, or, at least, which do not harmonize with the published descriptions. This form may in the future prove to be identical with *Seriola gigas* or *Seriola dubia;* it appears to be as distinct from either of these species as they from each other. It is therefore fully described as a new species under the name *Seriola Stearnsii*. We prefer thus to place the Pensacola specimen on record as a provisional new species rather than to identify it on insufficient grounds with an already-named species, of which the published descriptions are incomplete. A study of a large series of specimens will doubtless largely reduce the number of species in this genus.

Seriola Stearnsii, sp. nov.

A *Seriola* with slightly compressed body, the height of which (.248) is equal to one-fourth of its total length to the end of the middle caudal rays, its width (.14) about one-seventh of the same. (The height of the body is contained about $4\frac{2}{3}$ times in the length to the end of the middle caudal rays.) Its shape sub-fusiform, with greatest height at the origin of the second dorsal fin, whence its dorsal and ventral profiles slope gently and gracefully, with about the same curve, to the snout and the base of the caudal, which are nearly equidistant from the point referred to; the circumference of the body (.64) nearly two-thirds of its total length; its height at the ventrals (.22) about five times the length of the third dorsal spine; its least height at the tail (.04) equal to one-sixth its greatest height; the distance from the end of the base of the second dorsal to the base of the superior caudal lobe (.07) one-half of the greatest width of the body. The caudal peduncle is somewhat depressed and has prominent transverse grooves above and below and moderate lateral carinæ, the length of the prominent part of which is somewhat less than the length of the pectoral.

The length of the head (.28) is contained slightly more than $3\frac{1}{2}$ times in the length of the body and equals twice its own width (.14). The length of the snout (.10) is slightly greater than width of interorbital area (.095). Length of operculum (.07) slightly greater than half that of the upper jaw (.13) and slightly less than that of mandible (.15). The maxillary extends to the vertical through the middle of the eye, the mandible to that from its posterior margin. Diameter of eye (.04$\frac{1}{2}$)contained about three times in the length of the upper jaw and about $6\frac{1}{3}$ times in the length of the head (diameter of iris 7 times in length of head). The distance of the eye below the dorsal profile equals about two-thirds of its own vertical diameter, which is the same as the greatest width of the posterior flange of the maxillary bone. (The centre of the eye is situated at a distance below the dorsal profile (.04) contained less than four times in the height of the head (.14$\frac{1}{2}$) at that point. Compare with *S. gigas*.)

Intermaxillary teeth in a villiform band, broadest at the symphysis and decreasing in width to the end of the intermaxillary, which extends back nearly as far as the maxillary. Palatine teeth in a club-shaped patch, villiform. Vomerine teeth villiform, in an arrow-shaped patch, the length of which equals the short diameter of the eye, and its shape resembles that of the vomerine patch in *Rhomboplites*. Mandibulary teeth similar to those on the intermaxillaries in form and arrangement. On the tongue a median and two lateral patches of villiform teeth.

The distance of the first dorsal from the snout (.35) is slightly more than one-third of the length of the body; the length of its base about twice the length of its third spine. Its insertion is over the middle of the base of the ventral. The origin of the second dorsal is slightly in advance of the middle of the body, or about equidistant from the snout

and the grooves on the top of the caudal peduncle; its length of base (.42) exceeds twice that of the anal (.20). The first and last dorsal spines are extremely inconspicuous, hidden beneath the skin, so that the fish at first appears to have only five spines. The length of the largest (third) spine is about equal to the diameter of the eye, and does not exceed one-fifth of the height of the body. The height of the second dorsal at its longest ray (.10) equals the length of the snout.

The insertion of the anal is under the middle of the second dorsal, and is distant from the snout somewhat more than four times the length of the mandible; its greatest height (.09) is slightly less than the width of the interorbital area; the length of its base (.20) twice that of the snout; the length of the last rays (.063) is one-tenth of the distance of the snout from the insertion of the fin.

The caudal is broad, the lobes slender, falcate, equal; their length (.21) about twice the distance from the termination of the median rays to the notches on the caudal peduncle (.11).

The insertion of the pectoral is posterior to the vertical from the origin of the first dorsal; its extremity reaches to the vertical from the posterior termination of the first dorsal; its length (.13) is contained less than eight times in that of the body and nearly nine times in the distance from the snout to the end of the caudal.

The ventrals are inserted under the origin of the first dorsal, at a distance from the snout (.295) equal to twice the length of the mandible; the length of the fin (.13) equal to that of the pectoral, its extremity reaching to the vertical from the insertion of the second dorsal, and to a distance in front of the anal equal to the diameter of the eye.

Radial formula: B. VII; D. VII, 1, 36; A. II, 1, 19; P. 19; V. 6.

Scales small, as in other members of the genus, present upon the cheeks, but not upon the limb of the preoperculum or the remainder of the head. Lateral line with many curves, straight upon the tail.

Color bluish above, whitish beneath, a band of greenish yellow as wide as the eye extending from the preopercle to the extremity of the tail. Fins greenish; traces of bands on the operculum.

The specimen sent by Mr. Stearns (No. 22325) measures 568 millimetres (20½ inches) to the end of the middle caudal rays, and weighs 6¼ pounds. Concerning the species, Mr. Stearns writes: "No. 116 is called here by the fishermen 'Amber fish,' and is quite common along this coast in the deeper waters, but as they do not bite freely, not many are taken. Those that are caught are taken near the surface, as the hook is descending. Throughout the year they are found near the coast, where they probably breed. The specimen sent is rather below the average size. By most people it is considered a fine food fish."

The name "Amber fish" is applied to the fishes of this genus by English-speaking colonies the world over. It alludes to the amber-colored stripe upon the side.

Table of Measurements.

Current number of specimen	22,325.	
Locality	Pensacola, Fla.	
	Millimetres.	100ths of length.
Length to end of middle caudal rays	568	
Body:		
Greatest height		24.8
Greatest width		14
Greatest circumference		64
Height at ventrals		22
Least height of tail		4
Length of caudal peduncle		7
Head:		
Greatest length		28
Greatest width		14
Width of interorbital area		9.5
Length of snout		10
Length of operculum		7
Length of upper jaw		13
Length of mandible		15
Height of head through eye		14.5
Diameter of eye		4.5
Dorsal (spinous):		
Distance from snout		35
Length of base		8
Length of first spine		2.7
Length of second spine		3.9
Length of third spine		4.3
Length of fourth spine		3.2
Length of fifth spine		2.0
Dorsal (soft):		
Length of base		42
Length of first ray		4
Length of longest ray		10
Length of last ray		6
Anal:		
Distance from snout		63
Length of base		20
Length of longest ray		9
Length of last ray		6.3
Caudal:		
Length from notch on peduncle to end of middle rays		11
Length of external rays		21
Pectoral:		
Distance from snout		38.3
Length		13
Ventral:		
Distance from snout		29.5
Length		13
Branchiostegals	VII	
Dorsal	VII, 1, 36	
Anal	II, 1, 19	
Pectoral	19	
Ventral	6	

WASHINGTON, *April* 1, 1879.

ON THE BIRDS OF HELIGOLAND.

By H. GÄTKE.

HELIGOLAND, *March* 8, 1879.

Professor S. F. BAIRD,

Secretary Smithsonian Institution:

DEAR SIR: I have delayed answering your very kind communication till I might be able to inform you of the receipt of the box despatched